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Amendments to Claims

1. (Currently Amended.) A photoactive electronic device comprising:

   (a) an anode;

   (b) a cathode, said cathode having a work function energy level E_3;

   (c) a photoactive layer positioned between said anode and said cathode, said photoactive layer comprising a cyclometalated complex of a transition metal, said cyclometalated complex having a LUMO energy level E_2 and a HOMO energy level E_4; and

   (d) an electron transport and/or anti-quenching layer positioned between said cathode and said photoactive layer, said electron transport and/or anti-quenching layer having a LUMO energy level E_1 and a HOMO energy level E_5,
with the proviso that:

   (1) $E_1 - E_3 < 1\underline{e}V$,

   (2) $E_1 - E_2 > \underline{1V}\underline{0}$, and

   (3) $E_4 - E_5 > -1\underline{e}V$.

2. (Canceled)

3. (Original) The device of Claim 1 wherein $E_4 - E_5 > 0$.

4. (Currently Amended.) The device of Claim 1 wherein said electron transport and/or anti-quenching layer has an electron mobility of at least 10^{-7} $cm^2/(\underline{e}V \cdot sec)$.

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Original) The device of Claim 1 wherein the electron transport and/or anti-quenching layer comprises a quinoxaline derivative.

13. (Previously Presented) The device of Claim 12 wherein the quinoxaline derivative has Formula V,

(V)
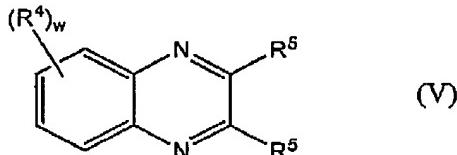
wherein:

R^4 and R^5 are the same or different at each occurrence and are selected from H, F, Cl, Br, alkyl, heteroalkyl, alkenyl, alkynyl, aryl, heteroaryl, alkylenearyl, alkenylaryl, alkynylaryl,

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alkyleneheteroaryl, alkenylheteroaryl, alkynylheteroaryl, $C_nH_aF_b$, $OC_nH_aF_b$, $C_6H_cF_d$, and $OC_6H_cF_d$, or both of R^5 together may constitute an arylene or heteroarylene group;

   a, b, c, and d are 0 or an integer such that $a+b = 2n + 1$, and $c + d = 5$;

   n is an integer; and

   w is 0 or an integer from 1 through 4.

   14. (Original) The device of Claim 13 wherein n is an integer from 1 through 12.

   15. (Currently Amended) The device of Claim 12 wherein the quinoxaline derivative is selected from Formulae V(a), V(b), V(d) through V(i) and V(k) through V(ag).
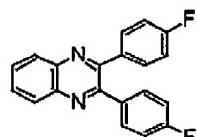
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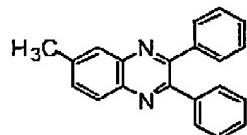
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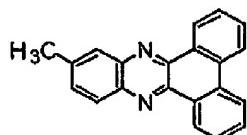
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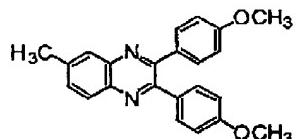
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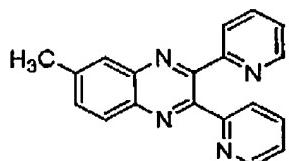
V(f)
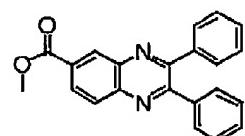
V(g)

V(h)

V(i)

V(k)

V(l)
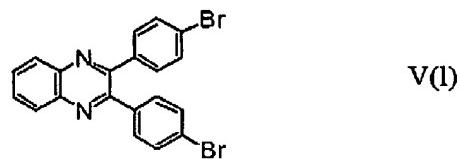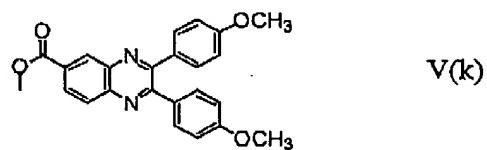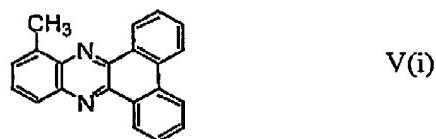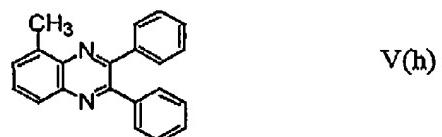
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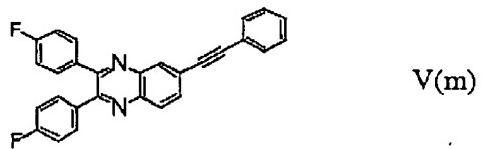
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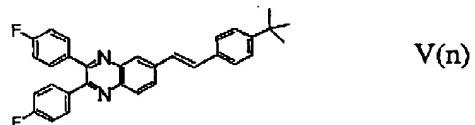
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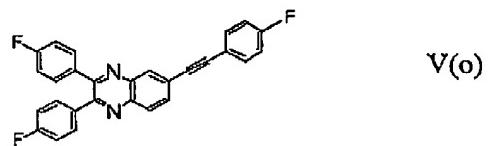
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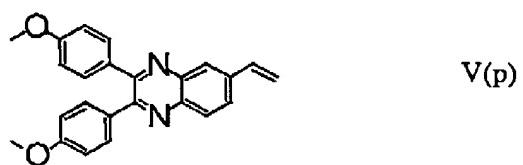
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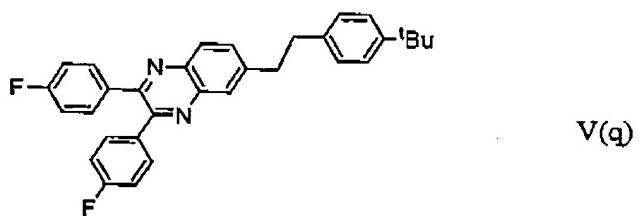
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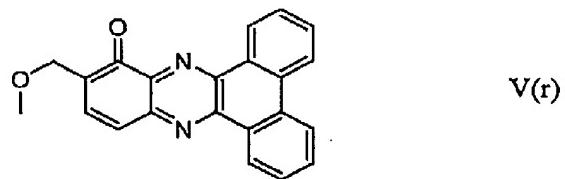
V(r)

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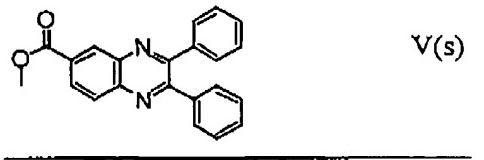
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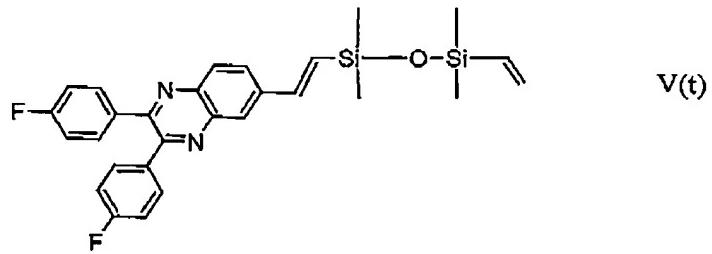
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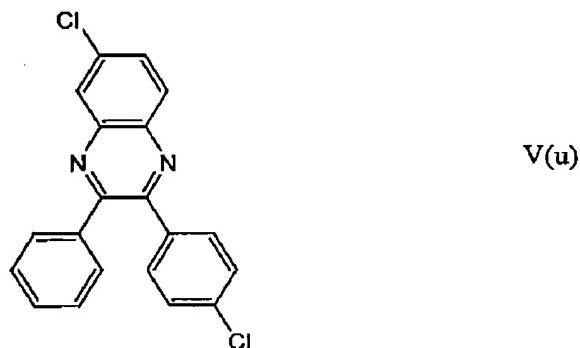
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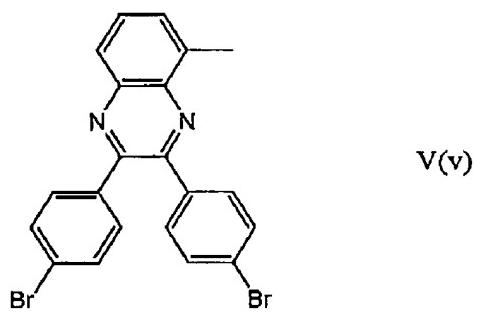
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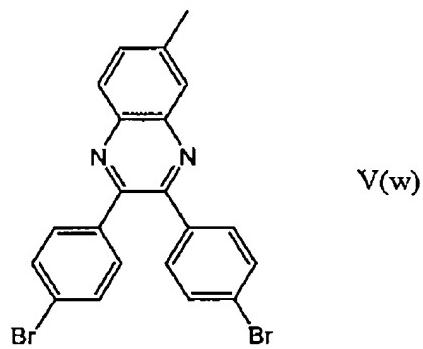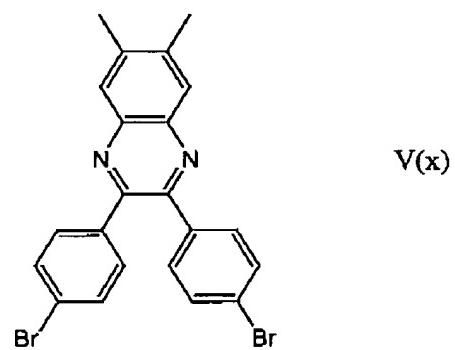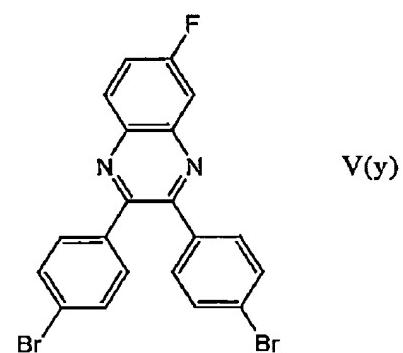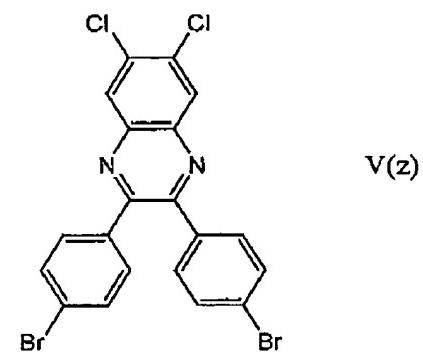
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V(w)

V(x)

V(y)

V(z)

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V(aa)

V(ab)

V(ac)

V(ad)
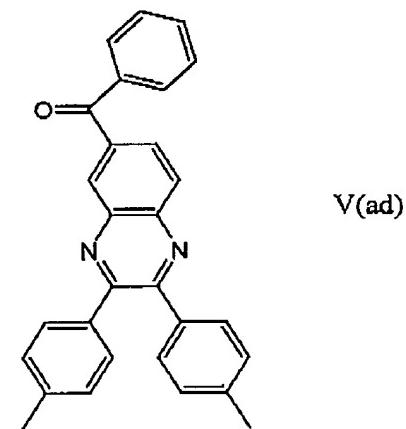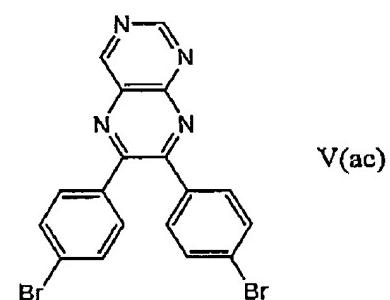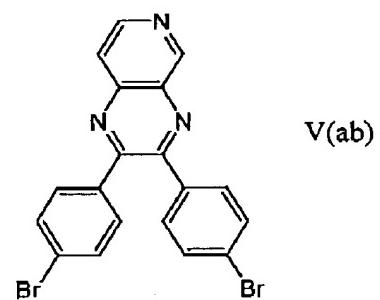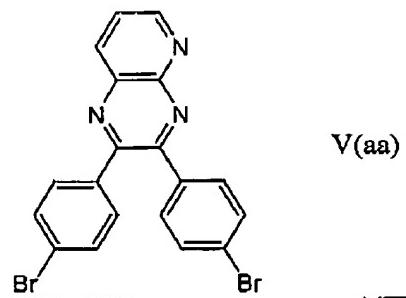
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V(ae)

V(af)

V(ag)
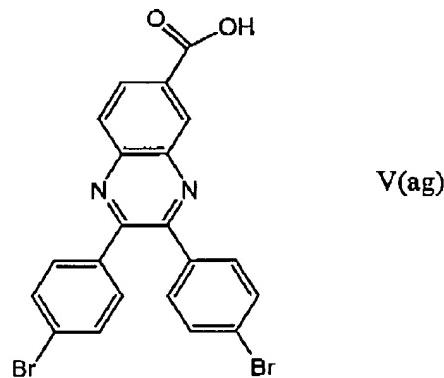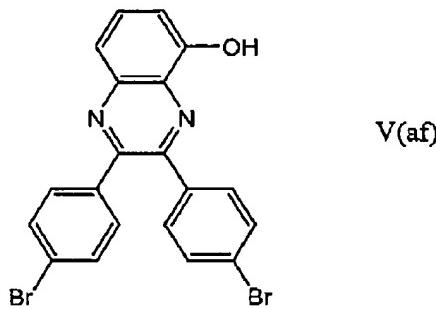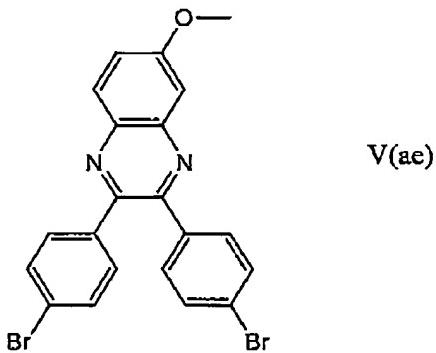
16. (Canceled)
17. (Canceled)
18. (Canceled)
19. (Canceled)
20. (Canceled)
21. (Canceled)
22. (Canceled)
23. (Previously Presented) The device of any one of Claims 1-4 and 12-15, wherein the device is a light-emitting diode, a light-emitting electrochemical cell, or a photodetector.